



### P7P55D Premium Xtreme Design - Hybrid Series The World's 1st SATA 6Gb/s Motherboard

- Intel LGA1156 Platform / Intel® P55 Express Chipset
- True SATA 6Gb/s Support
- · ASUS Hybrid Technology
- TurboV EVO
- TurboV Remote
- T.Probe Technology for Active Cooling



#### CPU, Chipset and Graphics features

#### **LGA1156 Intel® Lynnfield Processor Ready**

This motherboard supports the latest Intel® Lynnfield processors in LGA1156 package which has memory and PCI Express controller integrated to support 2-channel (4 DIMMs) DDR3 memory and 16 PCI Express 2.0 lanes providing great graphics performance. Intel® Lynnfield processor is one of the

most powerful and energy efficient CPU in the world.





#### Intel P55

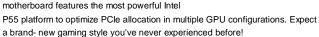
The Intel® P55 Express Chipset is the latest one-chipset design to support latest 1156 socket Intel® Core™ i7/Core™ i5 Processors. Intel® P55 providing improved performance by utilizing serial point-to-point links, allowing increased bandwidth and stability.



#### **Quad-GPU SLI and Quad-GPU CrossFireX Support!**

#### Flexible Multi-GPU solutions, Your Weapon of Choice!

P7P55D Premium brings you the multi-GPU choice of either SLI™ or CrossFireX. The motherboard features the most powerful Intel





#### **PCIe 2.0**

#### Double Speed; Double Bandwidth

This motherboard supports the latest PCle 2.0 devices for double speed and bandwidth which enhances system performance.



#### Memory Features

#### Dual-Channel DDR3 2200(O.C.) / 1600 / 1333 / 1066 support

The motherboard supports DDR3 memory that features data transfer rates of 2200(O.C.) / 1600 /1333 / 1066 MHz to meet the higher bandwidth requirements of the latest 3D graphics, multimedia, and Internet applications. The dual-channel DDR3 architecture enlarges the bandwidth of your system memory to boost system performance.



#### Next-gen Storage Technology



















Supporting next-generation Serial ATA (SATA) storage interface with onboard Marvell® controller, this motherboard delivers up to 6.0Gbps data transfer

rates. Additionally, get enhanced scalability, faster data retrieval, double the bandwidth of current bus systems.



**Other Solution** 



\* Please refer to specifications table for details.

#### ASUS Xtreme Design - Hybrid Processor



#### **ASUS TurboV EVO**

#### Ultimate O.C. Processor

Whether novice or enthusiast, TurboV Evo satisfies overclockers of any level. Intelligently push systems to the fastest, stable clock speeds with Auto-Tuning. Turbo Key boosts performance with a simple touch, while TurboV offers additional advanced options for breaking those records!







#### **Auto Tuning**

#### Auto System Level Up

Achieve extreme yet stable overclocking results automatically with Auto Tuning! With built-in stability testing, Auto Tuning lets even beginners improve performance with no additional cost.



#### **ASUS TurboV Remote**

#### Versatile, Real-time O.C. Hardware Controller

Tweak your settings real-time without interrupting ongoing work or games. With ASUS TurboV remote, you can overclock, activate Turbo Key and adjust EPU settings directly form a convenient side controller.



#### ASUS Xtreme Design - 48 Hybrid Phase\*

#### ASUS 32+3 Phase Power Design

#### Unprecedented Innovation with the Best Quality Component for Best Performance

The groundbreaking 32+3 phase VRM design is brought to the ASUS motherboards. 32+3 phase power design, 32-phase for vCore and extra 3-phase for Memory controller inside CPU, can provide the highest power efficiency, and hence generates less heat to effectively enhance the overclocking capability. With the high quality power components such as low RDS (on) MOSFETs, Ferrite core chokes with lower hysteresis loss and 100% Japan-made high quality conductive polymer capacitors, ASUS 32+3 phase VRM design also ensure longer component life and minimum power loss.

\*48 Hybrid Phase = 32+3 Phase x T.Probe



#### **Leading Active Cooling Technology**

**T.Probe** 

The T.Probe microchip detects and balances power phase loads and temperatures real-time. With optimal power phase functions, components run cooler and extend system lifespan.





#### 100% Ultra Long Life Japan-Made Solid Capacitors

This motherboard uses all high-quality conductive polymer capacitors onboard for durability, improved lifespan, and enhanced thermal capacity.



#### **ASUS Express Gate SSD**

#### 0 to Internet in Seconds!

Express Gate™ is an ASUS exclusive OS that provides you with quick access to the Internet and key applications before entering Windows®.



#### **ASUS Exclusive Features**

#### MemOK!

#### Any Memory is A-OK!

MemOK! quickly ensures memory boot compatibility. This remarkable memory rescue tool requires a mere push of a button to patch memory issues. MemOK! determines failsafe settings and dramatically improves your system boot success. Get your system up and running in no time!



#### **ASUS EPU**

#### System Level Energy Saving

helping save power and money.

The new ASUS EPU - the world's first power saving engine, has been upgraded to a new six engine version, which provides total system power savings by detecting current PC loadings and intelligently moderating power in real-time. With auto phase switching for components (which includes the CPU, VGA card, memory, chipset, drives and system fan), the EPU automatically provides the most appropriate power usage via intelligent acceleration and overclocking -



#### **ASUS Quiet Thermal Solution**

#### **ASUS Fanless Design - Heat-pipe solution**

The Heat Pipe design effectively directs the heat generated by the chipsets to the heatsink near the back IO ports, where it can be carried away by existing airflow from CPU fan or bundled optional fan. The purpose of the innovative heat pipe design on this motherboard is that the groundbreaking fanless design does not have lifetime problems as a chipset fan does. Furthermore, it provides options for users to install side-flow fan or passive cooler. The Heat Pipe design is the most reliable fanless thermal solution to date.



#### Up to 20°C(36°F) Cooler - Stack Cool 3+

#### Effective Fanless Heat Dissipation at 0dB

Stack Cool 3+ is a fanless cooling solution offered exclusively by ASUS. It effectively and noiselessly transfers heat generated by the critical components to the other side of the specially designed PCB (printed circuit board) for effective heat dissipation - making temperatures cooler by up to 20°C.



#### **Fan Xpert**

#### **Active Quiet & Cool**

ASUS Fan Xpert intelligently allows users to adjust both the CPU and chassis fan speed according to different ambient temperature, which is caused by different climate conditions in different geographic regions and system loading. Built-in variety of useful profiles offer flexible controls of fan speed to achieve a quiet and cool environment.



#### **ASUS Crystal Sound**

#### 10-channel Audio

Enjoy High-End 10-channel sound system on your PC! The onboard 10-channel HD audio (High Definition Audio, previously codenamed Azalia) CODEC enables high-quality 192KHz/24-bit audio output, jack-sensing feature, retasking functions and multi-streaming technology that simultaneously sends different audio streams to different destinations. This motherboard now adopts the future standard to deliver the most vivid audio enjoyment!!





#### **DTS Surround Sensation UltraPC**

DTS Surround Sensation UltraPC delivers exceptional 5.1 surround experience through the most common PC audio setups - your existing stereo speakers or headphones. In addition to virtual surround, "Bass enhancement" provides stronger low frequency bass sound, and "Voice clarification" provides clear human dialogue even with loud background sound. With these technologies, you may experience a better home-theater audio with ease.

### Noise Filtering

#### Eliminate background noise while recording

This feature detects repetitive and stationary noises like computer fans, air conditioners, and other background noises then eliminates it in the incoming audio stream while recording.

#### **ASUS EZ DIY**

#### **ASUS Onboard Switch**

With an easy press during overclock, this exclusive onboard switch allows gamer to effortless fine-tune the performance without having to short the pins!



#### Q- Shield

#### Easy and Comfortable Installations

The specially designed ASUS Q-Shield does without the usual "fingers" - making it convenient and easy to install. With better electric conductivity, it ideally protects your motherboard against static electricity and shields it against Electronic Magnetic Interference (EMI).



#### EZ-Flash 2

## Simply update BIOS from a USB flash disk before entering the OS

EZ Flash 2 is a user-friendly BIOS update utility. Simply launch this tool and update BIOS from a USB flash disk before entering the OS. You can update your BIOS only in a few clicks without preparing an additional floppy diskette or using an OS-based flash utility.



#### **ASUS Q-Design**

#### DIY quickly, DIY easily!

ASUS Q-Design enhances your DIY experience. All of Q-LED, Q-Slot and Q-DIMM design speed up and simplify the DIY process!



#### **Q-Connector**

#### Make connection quick and accurate!

The ASUS Q-Connector allows you to connect or disconnect chassis front panel cables in one easy step with one complete module. This unique adapter eliminates the trouble of plugging in one cable at a time, making connection quick and accurate.



#### O.C. Profile

#### Conveniently store or load multiple BIOS settings

Freely share and distribute favorite overclocking settings The motherboard features the ASUS O.C. Profile that allows users to conveniently store or load multiple BIOS settings. The BIOS settings can be stored in the CMOS or a separate file, giving users freedom to share and distribute their favorite overclocking settings.



#### Industry Standard

#### IEEE 1394a interface

IEEE 1394a interface provides high speed digital interface for audio/video appliances such as digital television, digital video camcorders, storage peripherals & other PC portable devices.



#### S/PDIF-out on Back I/O Port

This motherboard provides convenient connectivity to external home theater audio systems via coaxial and optical S/PDIF-out (SONY-PHILIPS Digital Interface) jacks. It allows to transfer digital audio without converting to analog format and keeps the best signal quality.



#### RoHS

#### **GreenASUS**

The motherboard and its packaging comply with the European Union's Restriction on the use of Hazardous Substances (RoHS). This is in line with the ASUS vision of creating environment-friendly and recyclable products and packaging to safeguard consumers' health while minimizing the impact on the environment.



# Specifications

poomoations	
CPU	Intel® Socket 1156 Core™ i7 Processor/Core™ i5 Processor Supports Intel® Turbo Boost Technology
Chipset	Intel® P55 Express Chipset
Memory	4 x DIMM, Max. 16 GB, DDR3 2200(O.C.)*/1600/1333/1066 Non-ECC,Un-buffered Memory Dual Channel memory architecture Supports Intel® Extreme Memory Profile (XMP)  *Hyper DIMM support is subject to the physical characteristics of individual CPUs. Some hyper DIMMs only support one DIMM per channel. Please refer to Memory QVL for details.  *Refer to www.asus.com or the user manual for the Memory QVL(Qualified Vendors Lists).
Expansion Slots	2 x PCle 2.0 x16 (single at x16 or dual at x8/x8 mode) 2 x PCle 2.0 x1 (2.5GT/s) 2 x PCl
Multi-GPU Support	Supports NVIDIA® Quad-GPU SLI™ Technology Supports ATI® Quad-GPU CrossFireX™ Technology
Storage	Intel® P55 Express Chipset built-in 6 xSATA 3.0 Gb/s ports Intel Matrix Storage Technology Support RAID 0,1,5,10 JMicron® JMB368 PATA controller 1 xUltraDMA 133/100/66 for up to 2 PATA devices Marvell® 88SE9123 SATA controller: - 2 x SATA 6.0 Gb/s ports (gray)
LAN	Dual Gigabit LAN controllers Realtek® 8112L / 8110SC Gigabit LAN controller featuring Al NET2 and Teaming
Audio	VIA® VT2020 10-Channel High Definition Audio CODEC  - Absolute Pitch BD192/24 featuring ENVY HD  - DTS Surround Sensation UltraPC  - Supports Jack-Detection, Multi-streaming, Front Panel Jack-Retasking  - Coaxial / Optical S/PDIF out ports at back I/O
IEEE 1394	VIA® 6308P controller supports 2 x 1394a ports (one at mid-board; one at back panel)
USB	12 USB 2.0/1.1 ports (4 ports at mid-board, 8 ports at back panel)
ASUS Unique Features	ASUS Hybrid Processor - TurboV EVO  - Auto Tuning, TurboV and Turbo Key  - TurboV Remote  ASUS 48 Hybrid Phase*  - T.Probe Technology for Active Cooling  - 32+3 Phase Power Design  - 100% Ultra Long Life Japan-Made Solid Capacitors  *48 Hybrid Phase = 32+3 Phase x T.Probe  ASUS Hybrid OS - Express Gate SSD  ASUS Xtreme Design  ASUS Exclusive Features  - MemOK!  - ASUS EPU  ASUS Quiet Thermal Solution  - ASUS Fanless Design: Heat-pipe solution  - ASUS Fanless Design: Stack Cool 3+  - ASUS Fan Xpert  ASUS Crystal Sound  - ASUS Noise Filter  ASUS EZ DIY

	- ASUS Q-Shield - ASUS Q-Connector - ASUS O.C. Profile - ASUS CrashFree BIOS 3 - ASUS EZ Flash 2 - ASUS MyLogo 2 - Multi-language BIOS ASUS Q-Design - ASUS Q-LED (CPU, DRAM, VGA, Boot Device LED) - ASUS Q-Slot - ASUS Q-DIMM
Overclocking Features	Precision Tweaker 2  - vCore: Adjustable CPU voltage at 0.00625V increment  - vIMC: Adjustable IMC voltage at 0.00625V increment  - vDRAM Bus: 81-step DRAM voltage control  - vPCH: 2-step chipset voltage control  - vCPU_PLL: 4-step reference voltage control  SFS (Stepless Frequency Selection)  - PCI Express frequency tuning from 100MHz up to 200MHz at 1MHz increment  - Internal Base Clock tuning from 80MHz up to 500MHz at 1MHz increment  Overclocking Protection  - ASUS C.P.R.(CPU Parameter Recall)
Back Panel I/O Ports	1 x IEEE 1394a 2 x LAN(RJ45) port 8 x USB 2.0/1.1 10 -Channel Audio I/O 1 x PS/2 Keyboard port (Purple) 1 x PS/2 mouse port (Green) 1 x Coaxial S/PDIF Output 1 x Optical S/PDIF Output 1 x Clear CMOS switch
Internal I/O Connectors	2 x USB connectors support additional 4 USB ports  1 x IDE connector  1 x TPM connector  1 x IEEE 1394a connector  1 x CPU Fan connector  1 x Power Fan connector  1 x COM connector  6 x SATA 3.0Gb/s connectors (blue)  2 x SATA 6.0Gb/s connectors (gray)  2 x Chassis Fan connector (1x4-pin, 1x3-pin)  Front panel audio connector  1 x S/PDIF Out Header  1 x CD audio in  1 x 24-pin ATX Power connector  1 x 8-pin ATX 12V Power connector  5 xystem Panel(Q-Connector)  1 x TURBO_CON header (for TurboV Remote)  1 x MemOK! button  1 x Power on switch  1 x Reset switch
BIOS	16 Mb Flash ROM , AMI BIOS, PnP, DMI2.0, WfM2.0, SM BIOS 2.5, ACPI 2.0a, Multi-language BIOS, ASUS EZ Flash 2, ASUS CrashFree BIOS 3
Manageability	WfM 2.0,DMI 2.0,WOL by PME,WOR by PME,PXE
Accessories	User's manual  1 x UltraDMA 133/100/66 cable  1 x TurboV Remote  2 x Serial ATA 6.0Gb/s cables  4 x Serial ATA 3.0Gb/s cables  1 x 2-port USB and eSATA module  ASUS Q-Shield  2 in 1 Q-connector  1 x ASUS SLI bridge connector
Support Disc	Drivers ASUS Update ASUS Utilities

Anti-virus	software	(OEM version)	١

Form Factor ATX Form Factor

12 inch x 9.6 inch ( 30.5 cm x 24.4 cm )